AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method comprising:

receiving signals from a satellite navigation system and signals from a wireless communication system;

receiving a timing bias from the wireless communication system, wherein the timing bias includes a common system synchronization bias that defines a difference between a system time for the satellite navigation system and a system time for the wireless communication system; and

determining a position solution for a mobile unit based on a hybrid position location technique for an asynchronous environment, and as a function of the received signals, a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and using the common system synchronization bias.

2. (Original) The method of claim 1, wherein determining the position solution comprises:

computing the system time for the satellite navigation system;

computing the system time for the wireless communication system as a function of the computed system time of the satellite navigation system and the synchronization bias; and

computing a position solution as a function of the received signals and the computed system times.

3. (Original) The method of claim 1, wherein the synchronization bias constrains the system time of the wireless communication system within a range of time from the system time of the satellite navigation system.

4. (Original) The method of claim 1, wherein the synchronization bias defines an expected time offset between the system time for the satellite navigation system and the system time for the wireless communication system.

5. (Original) The method of claim 1, wherein computing a position solution comprises computing a latitude, a longitude and an altitude for the mobile unit.

6. (Original) The method of claim 1, wherein the satellite navigation system comprises a Global Positioning System (GPS).

7. (Canceled)

8. (Canceled)

9. (Original) The method of claim 1, further comprising receiving data from a component of the wireless communication system that defines the synchronization bias.

10. (Original) The method of claim 1, further comprising applying an altitude-aiding technique to determine an extra measurement for use in determining the position solution.

11. (Original) The method of claim 1, further comprising:

receiving a total of M signals from the wireless communication system and the satellite navigation network;

generating M distance measurements from the signals; and

detecting the presence of one or more erroneous distance measurements from one or more of the signals based on the M distance measurements and the synchronization bias.

12. (Original) The method of claim 11, wherein $M \geq 4$.

13. (Original) The method of claim 11, wherein the position solution comprises M variables.

14. (Original) The method of claim 11, further comprising:

applying an altitude-aiding technique to determine an extra measurement; and

detecting the presence of the erroneous distance measurements based at least in part on the extra measurement.

15. (Currently Amended) A method comprising:

receiving a request from a mobile unit operating within an environment having a satellite navigation system and a wireless communication system, wherein the wireless communication system comprises more than one base station;

communicating to the mobile unit, in response to the request, common system synchronization bias data that constrains a system time of the satellite navigation system as a function of a system time of the wireless communication system; and

computing, a position solution for the mobile unit based on a hybrid position location technique for an asynchronous environment, based on independent measurements from more than one base station, and as a function of a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and the common system synchronization bias data.

16. (Original) The method of claim 15, further comprising retrieving the synchronization bias data from a database.

17. (Original) The method of claim 16, wherein retrieving from a database comprises retrieving from a database a synchronization bias specific to the requesting mobile unit.

18. (Original) The method of claim 16, wherein retrieving from a database comprises:

identifying a current region of the wireless communication system for the requesting mobile unit; and

retrieving the data from the database based on the identified region.

19. (Original) The method of claim 15, further comprising:

receiving data from the mobile unit that describes a computed synchronization bias; and

updating the database based on the received data.

20. (Currently Amended) The method of claim 19 [[15]], further comprising:

comparing the computed synchronization bias to a threshold bias; and

determining a functional status of a component within the wireless communication system based on the comparison.

21. (Original) The method of claim 20, further comprising issuing a service message when the computed synchronization bias exceeds the threshold bias.

22. (Original) The method of claim 20, wherein the component comprises a base station within the wireless communication system.

23. (Original) The method of claim 20, wherein the component comprises a mobile unit within the wireless communication system.

24. (Currently Amended) An apparatus comprising:

one or more antennas to receive signals from a satellite navigation system and a wireless communication system, wherein the wireless communication system comprises more than one base station; and

a processor to compute a position solution for a mobile unit based on a hybrid position location technique for an asynchronous environment as a function of the received signals using a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and a common system synchronization bias that defines a difference between a system time for the satellite navigation system and a system time for the wireless communication system.

25. (Original) The apparatus of claim 24, wherein the satellite navigation system comprises a Global Positioning System (GPS), and the wireless communication system comprises a Code Division Multiple Access (CDMA) wireless communication system.

26. (Original) The apparatus of claim 25, wherein the apparatus comprises a mobile GPS receiver.

27. (Original) The apparatus of claim 24, wherein the synchronization bias constrains the system time of the wireless communication system within a range of time from the system time of the satellite navigation system.

28. (Original) The apparatus of claim 24, wherein the synchronization bias defines an expected time offset between the system time for the satellite navigation system and the system time for the wireless communication system.

29. (Original) The apparatus of claim 24, wherein the processor computes a latitude, a longitude and an altitude for a receiver.

30. (Canceled)

31. (Canceled)

32. (Original) The apparatus of claim 24, wherein the processor generates M distance measurements from the signals, and applies Receiver Autonomous Integrity Monitoring (RAIM) to detect the presence of one or more erroneous distance measurement from one or more of the signals based on the M distance measurements and the synchronization bias.

33. (Original) The apparatus of claim 32, wherein M>N, where N is a number of position solution variables.

34. (Original) The apparatus of claim 32, wherein N=4.

35. (Original) The apparatus of claim 24, wherein the processor receives data from a component of the wireless communication system that defines the synchronization bias

36. (Original) The apparatus of claim 35, wherein the processor computes a new synchronization bias for the wireless communication system and satellite navigation system upon determining a position solution, and communicates the computed synchronization bias to the component.

37. (Original) The apparatus of claim 24, wherein the processor comprises a digital signal processor.

38. (Currently Amended) A system comprising:

a server to store common system synchronization bias data that defines a difference between a system time for a satellite navigation system and a system time for a wireless communication system, wherein the wireless communication system comprises more than one base station; and

a device to receive the common system synchronization bias data from the server, and determine a position solution based on a hybrid position location technique for an asynchronous environment as a function of the common synchronization bias data and signals received from the satellite navigation system and the wireless communication system and a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique.

39. (Original) The system of claim 38, wherein the server selectively retrieves synchronization bias data from a database based on an identifier for the device.

40. (Original) The system of claim 38, wherein the server maintains a database to store data defining a set of synchronization biases arranged in accordance with identifiers for respective regions of the wireless communication system.

41. (Original) The system of claim 38, wherein the satellite navigation system comprises a Global Positioning System (GPS), and the wireless communication system comprises a Code Division Multiple Access (CDMA) wireless communication system.

42. (Original) The system of claim 41, wherein the device comprises a mobile GPS receiver.

43. (Original) The system of claim 38, wherein the synchronization bias data constrains the system time of the wireless communication system within a range of time from the system time of the satellite navigation system.

44. (Original) The system of claim 38, wherein the synchronization bias data defines an expected time offset between the system time for the satellite navigation system and the system time for the wireless communication system.

45. (Original) The system of claim 38, wherein the device computes a latitude, a longitude and an altitude.

46. (Original) The system of claim 38, wherein the device comprises one of a mobile unit, a location server, a Position Determination Entity (PDE), a Location Measuring Unit (LMU), a Serving Mobile Location Centers (SMLC), a Wireless Location Gateway (WLG), and a Mobile Location Center (MLC).

47. (Currently Amended) A method comprising:

receiving signals at a device from a plurality of systems having synchronous system times; and

determining a position solution for the device based on a hybrid position location technique for an asynchronous environment as a function of the signals, a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and a common system synchronization bias that defines a difference between the system times, wherein the systems comprise more than one system element.

48. (Original) The method of claim 47, wherein determining the position solution comprises:

computing a time for a first one of the systems;

computing a time for a second one of the systems as a function of the computed time of the first system and the synchronization bias; and

computing a position solution as a function of the signals and the computed times for the first and second systems.

49. (Original) The method of claim 47, wherein the synchronization bias constrains the system time of a first one of the systems within a defined range from the system time of a second one of the systems.

50. (Currently Amended) A computer-readable medium encoded with a computer program comprising instructions to cause a processor to determine a position solution for a mobile unit based on a hybrid position location technique for an asynchronous environment as a function of signals received from a satellite navigation system, signals received from a wireless communication system, a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and a common system synchronization bias that defines a difference between system times for the satellite navigation system and the wireless communication system, wherein the wireless communication system comprises more than one base station.

51. (Original) The computer-readable medium of claim 50, wherein the synchronization bias defines the system time of the wireless communication system as within a range of time from the system time of the satellite navigation system.

52. (Original) The computer-readable medium of claim 50, wherein the synchronization bias defines a time offset between the system time for the satellite navigation system and the system time for the wireless communication system.

53. (Original) The computer-readable medium of claim 50, wherein the instructions cause the processor to compute a position solution comprises computing a latitude, a longitude and an altitude for a receiver.

54. (Original) The computer-readable medium of claim 50, wherein the satellite navigation system comprises a Global Positioning System (GPS).

55. (Canceled)

56. (Canceled)

57. (Original) The computer-readable medium of claim 50, wherein the instructions cause the processor to receive data from a component of the wireless communication system that defines the synchronization bias.

58-60. (Canceled)

61. (Currently Amended) A method comprising:

receiving sets of position related measurements for a device, the measurements of each of the sets having a common bias with respect to the measurements of the other set; and

computing a position solution for the device based on a hybrid position location technique for an asynchronous environment as a function of the measurements, wherein a number of independent measurements is based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique, and the common bias.

62. (Original) The method of claim 61, wherein receiving sets of position related measurements comprises receiving a first set of position related measurements from a satellite navigation system and a second set of position related measurements from a wireless communication system.

63. (Original) The method of claim 62, wherein the common bias represents a difference in system times for the satellite navigation system and the wireless communication system.

64. (Currently Amended) A method comprising:

receiving sets of position related measurements for a device from a plurality of systems;

determining different system times for each of the systems according to a common system bias; and

determining a position solution for the device based on a hybrid position location technique for an asynchronous environment as a function of the measurements and the system times wherein a number of independent measurements is based on a position location technique for a synchronous environment, wherein the number of independent measurements is fewer than a minimum number of measurements for an asynchronous position location technique.

65. (Original) The method of claim 64, wherein the measurements of each of the sets having a common bias with respect to the measurements of the other set

66. (Original) The method of claim 64, wherein receiving sets of position related measurements comprises receiving a first set of position related measurements from a satellite navigation system and a second set of position related measurements from a wireless communication system.

67. (Original) The method of claim 64, wherein receiving sets of position related measurements comprises receiving a first set of position related measurements from a first ground-based wireless communication system and a second set of position related measurements from a second ground-based wireless communication system.

68. (Original) The method of claim 64, wherein the measurements of each of the sets have a common bias with respect to the measurements of the other set, and determining a position solution comprises determining the position solution using a constraint on the system times in accordance with the common bias.

69. (Original) The method of claim 68, wherein the common bias represents a difference in the system times for the systems.

70. (Canceled)

71. (Previously Presented) An apparatus comprising:

one or more antennas to receive signals from a satellite navigation system and a wireless communication system, wherein the wireless communication system comprises more than one base station; and

a processor to compute a position solution for a mobile unit as a function of the received signals using a common system synchronization bias that defines a difference between a system time for the satellite navigation system and a system time for the more than one base station of the wireless communication system,

wherein the synchronization bias constrains the system time of the wireless communication system within a range of time from the system time of the satellite navigation

system, and the synchronization bias defines an expected time offset between the system time for the satellite navigation system and the system time for the wireless communication system, and

wherein the processor generates M distance measurements from the signals, and applies Receiver Autonomous Integrity Monitoring (RAIM) to detect the presence of one or more erroneous distance measurement from one or more of the signals based on the M distance measurements and the synchronization bias.

72 (New) The apparatus of claim 71, wherein the processor computes the position solution by computing the system time for the satellite navigation system, computing the system time for the wireless communication system as a function of the computed system time of the satellite navigation system and the synchronization bias, and computing a position solution as a function of the received signals and the computed system times.

73. (New) The apparatus of claim 71, wherein the processor computes a latitude, a longitude and an altitude for the mobile unit.

74. (New) The apparatus of claim 71, wherein the processor receives, via the one or more antennas, altitude-aiding data for use in computing the position solution.

75. (New) The apparatus of claim 71, wherein M>N, where N is a number of position solution variables.

76. (New) The apparatus of claim 71, wherein the satellite navigation system comprises a Global Positioning System (GPS), and the wireless communication system comprises a Code Division Multiple Access (CDMA) wireless communication system.

77. (New) The apparatus of claim 71, wherein the processor computes the position solution for the mobile unit based on a hybrid position location technique.

78. (New) A method of determining a position solution for a mobile unit, the method comprising:

receiving signals from a satellite navigation system;

receiving signals from a wireless communication system, wherein a system time of the wireless communication system is asynchronous with a system time of the satellite navigation system;

receiving a timing bias value from the wireless communication system;

constraining a difference between the system time for the satellite navigation system and the system time for the wireless communication system based on the timing bias value to configure the mobile unit to a semi-synchronous mode; and

determining a position solution for the mobile unit based on a hybrid position location technique for an asynchronous environment, and as a function of the received signals, a number of independent measurements based on a position location technique for a synchronous environment, wherein the number of independent measurements for the synchronous environment is fewer than a minimum number of measurements for an asynchronous position location technique.